



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/926,277	09/05/97	VACHRIS	P 6357-19259

MORRIS MANNING & MARTIN  
1600 ATLANTA FINANCIAL CENTER  
3343 PEACHTREE NE  
ATLANTA GA 30326

MM12/0803

EXAMINER

ROSENBERGER, R

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 08/03/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No.

08/926,277

Applicant(s)

Vachris et al

Examiner

RA Rosenberg

Group Art Unit

2877

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 2/22/99
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-16, 18-46 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-16, 18-46 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 12
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9-12, 15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, form which claim 9 ultimately depends, calls for a "single electrode electroluminescent device". Claim 9 states the device is "further comprising" "a transparent electrode layer". It is unclear whether this "transparent electrode layer" is the "single electrode" already claimed in claim 1, or if it is another electrode; the phrase "further comprising" seems to state that it is a second electrode, which renders claim 9 improper, since it is not clear how a "single electrode device" can have two electrodes.

- 3: Claims 23-37 and 44 rejected under 35 U.S.C. 112, first paragraph for not being properly supported by the specification as filed and under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what is being claimed and how what is being claimed relates to what is disclosed. These claims all apparently call for a "single electrode device" having two electrodes; that is contradictory.

There appears to be no disclosure to support what is claimed. The claims appear to be generally directed to the embodiment in which the relief object is used as an electrode, that is, the embodiment of instant figures 1, 1A, 3, 4 and 5. However, none of these embodiments are disclosed as having a flexible electrode. The embodiment of figure 3, which appears to be the closest, has a "pixilated, low work function metalization layer" (see instant page 16, lines 5 and 10-11), although in the specification this layer is not called an electrode. There is a variant of the embodiment of figure 3 discussed on page 16, line 14 through page 17, line 6, which has what may be the claimed pressure-variable resistive layer in what appears to be an embodiment in which the relief object acts as an electrode, but this embodiment does not described as having a flexible electrode. The pixilated metallic layer (page 17, line 3), if it can be considered an "electrode", is not described as being "flexible", nor described as being made of materials which would render it necessarily flexible.

These claims appear to be a confused mixture of the two general embodiments (that of figures 1, 1A, 3 4 and 5 and that of figure 2). Either the subject matter of these claims in not properly disclosed in the specification, or the

claims are so poorly worded it is unclear what disclosed subject matter is being claimed.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Derwent abstract XP-002080114 and Derwent abstract XP-002080115.

Both references teach a single electrode electroluminescent device and a electrical current source connected to the single electrode and to a relief object, such as a finger, to display the pattern of ridges and valleys on the relief object.

7. Claims 1, 5, 7, 38 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by the Abstract of Japanese patent 02126381.

The references teaches a single electrode electroluminescent device and a electrical current source connected to the single electrode and to a relief object, such as a finger, to display the pattern of ridges and valleys on the relief object. The reference teaches a lens and a CCD sensor (11).

8. Claims 1-16, 18-22, and 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derwent abstract XP-002080114, Derwent abstract XP-002080115 and the Abstract of Japanese patent 02126381.

All three references teach the basic disclosed invention. The use of any known electroluminescent material, be it organic or inorganic, would have been obvious. Those of ordinary skill could have made the surface any desired shape to accommodate the relief object to be measured; it is well-known in the art that fingerprints are curved and that curved surfaces can better accommodate fingerprints than flat surfaces. Those in the art could form that various parts of the device by any known manufacturing technique and of any known materials appropriate to the construction.

9. Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as obvious over Gaffney (WO 9716834).

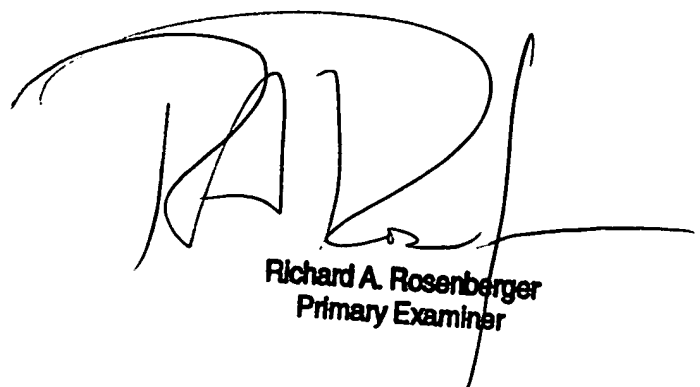
Gaffney teaches the claimed use of a device with two electrodes, one of them being a flexible electrode, a light emitting layer between the electrodes, and a variable resistive layer between the flexible electrode and the light emitting layer. When a relief object is brought into contact with the flexible electrode, localized pressure gradients create a light image of the relief object.

10. Papers related to this application may be submitted to Group 2800 by facsimile transmission. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The fax number is (703) 308-7722.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberger whose telephone number is (703) 308-4804.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

R. A. Rosenberger  
26 July 1999



Richard A. Rosenberger  
Primary Examiner